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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/890,758	08/02/2001	Hiroaki Onishi	10921.99USWO	7944
<div>7590      10/31/2007 Hamre Schumann Mueller &amp; Larson PC P O Box 2902-0902 Minneapolis, MN 55402</div>			<div>EXAMINER WORKU, NEGUSSIE</div>	
			<div>ART UNIT 2625</div>	<div>PAPER NUMBER</div>
			<div>MAIL DATE 10/31/2007</div>	<div>DELIVERY MODE PAPER</div>

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	09/890,758		ONISHI ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Negussie Worku		2625	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 January 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>See Attachment</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

1. This is a replay to the appeal brief filed on Jan 26, 2007, in which, claims 1, 3, 5-19 are pending. Claims 1, 5, 15 and 16 are independent, and claims 2, 3, 6-14, 17-19 are dependent.

### ***Response to Arguments***

2. Applicant's arguments, see applicant's response, filed on 01/26/07, with respect to the rejection(s) of claim(s) 1, 3, 5-19, have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of the Office action submitted below.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito (USPN 6,343,162), in view of Kurara et al. (USPN 4,518,999).

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With respect to claim 1, Saito et al. teaches an image sensor (contact image sensor of fig 1) comprising: a transparent cover (transparent glass cover 1 of fig 1) having a first surface on an image reading region side, and a second surface away from the first surface (transparent glass cover 1 of fig 1, having first surface a surface on image reading region side, wherein the document to be read is placed, and the opposite side of the cover glass 1, as second surface away from the first side, as shown in fig 1, col.4, lines 10-15); a light source throwing light to the image reading region from a second-surface side of the transparent cover (a light source 3, positioned on the second side of cover glass 1, direct light to the image reading region which is a document placed on the cover glass 1 of fig 1, col.4, lines 15-19); and a plurality of light receiving elements (group of light receiving element 12 as shown in fig 2A) each receiving reflected light from the image reading region and outputting an image signal corresponding to an amount of the light received (light receiving means 12 of fig 1, receives light directed from the image to be read placed on the cover glass 1 of fig 1, col.4, lines 64-65)) wherein the transparent cover (transparent cover glass 1 of fig 1) includes a transparent main body of a synthetic resin, (frame 9 of fig 1) and a transparent glass member (glass cover 1 of fig 1) corresponding to the image reading region, (cover glass 1, a means to place a document to be read), and wherein the transparent main body and the transparent glass member each have a surface which is flush with each other and provide the first surface (transparent glass member 1 of fig 1, and transparent main body [frame] 9 of fig 1, positioned over each other, as seen in fig 1).

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Although Sato (162) shows a frame 9, where in the transparent cover glass is fixed on (as shown in fig 1). However, Sato fails to explicitly teach wherein the transparent main body has a groove corresponding to the image reading region, to place the transparent glass member being placed in the groove.

Kurata et al (999) in the same area of image reading apparatus teaches wherein the transparent main body has a groove corresponding to the image reading region, to place the transparent glass member being placed in the groove (.FIG. 3 illustrates a position actuating section of a picture image position setting apparatus provides at a front end portion of a transparent platen 21. the platen 21 is formed with an elongated groove 22 extending in the Y-direction (main scanning direction) in the upper surface and at the front end portion thereof, as discussed in col.2, lines 55-65).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the imaging apparatus Saito (162) to include: wherein the transparent main body has a groove corresponding to the image reading region, to place the transparent glass member being placed in the groove.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified imaging device of Saito by the teaching of (Kurata (999), it would have help a user to have a device that do not cause a vibration during the movement of the scanner, to avoid a blur on the image to be read due to a shake case by the moving mechanism.

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With regard to claim 3. Saito fails to teach the image sensor, wherein the groove is provided by a through hole formed in the transparent cover.

Kurata et al (999) in the same area of image reading apparatus teaches wherein the groove is provided by a through hole formed in the transparent cover, (.FIG. 3 illustrates a position actuating section of a picture image position setting apparatus the groove 22 of fig 3, is provided by a through hole formed on the platen of fig 3, at a front end portion of a transparent platen 21, the platen 21 is formed with an elongated groove 22 extending in the Y-direction (main scanning direction) in the upper surface and at the front end portion thereof, as discussed in col.2, lines 55-65).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the imaging apparatus Saito (162) to include: wherein the transparent main body has a groove corresponding to the image reading region, to place the transparent glass member being placed in the groove.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified imaging device of Saito by the teaching of (Kurata (899), it would have help a user to have a device that do not cause a vibration during the movement of the scanner, to avoid a blur on the image to be read due to a shake case by the moving mechanism.

With respect to claim 5, Saito et al. teaches an image sensor (contact image sensor of fig 1) comprising: a transparent cover (transparent glass cover 1 of fig 1) having a first surface on an image reading region side, and a second surface away from

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the first surface (transparent glass cover 1 of fig 1, having first surface a surface on image reading region side, wherein the document to be read is placed, and the opposite side of the cover glass 1, as second surface away from the first side, as shown in fig 1, col.4, lines 10-15); a light source throwing light to the image reading region from a second-surface side of the transparent cover (a light source 3, positioned on the second side of cover glass 1, direct light to the image reading region which is a document placed on the cover glass 1 of fig 1, col.4, lines 15-19); and a plurality of light receiving elements (group of light receiving element 12 as shown in fig 2A) each receiving reflected light from the image reading region and outputting an image signal corresponding to an amount of the light received (light receiving means 12 of fig 1, receives light directed from the image to be read placed on the cover glass 1 of fig 1, col.4, lines 64-65)) wherein the transparent cover (transparent cover glass 1 of fig 1) includes a transparent main body of a synthetic resin, (frame 9 of fig 1) and a transparent glass member (glass cover 1 of fig 1) corresponding to the image reading region, (cover glass 1, a means to place a document to be read), and wherein the transparent main body and the transparent glass member each have a surface which is flush with each other and provide the first surface (transparent glass member 1 of fig 1, and transparent main body [frame] 9 of fig 1, positioned over each other, as seen in fig 1).

Although Sato (162) shows a frame 9, where in the transparent cover glass is fixed on (as shown in fig 1). However, Sato fails to explicitly to teach wherein the

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transparent main body has a groove corresponding to the image reading region, to place the transparent glass member being placed in the groove.

Kurata et al (999) in the same area of image reading apparatus teaches wherein the transparent main body has a groove corresponding to the image reading region, to place the transparent glass member being placed in the groove (.FIG. 3 illustrates a position actuating section of a picture image position setting apparatus provides at a front end portion of a transparent platen 21. the platen 21 is formed with an elongated groove 22 extending in the Y-direction (main scanning direction) in the upper surface and at the front end portion thereof, as discussed in col.2, lines 55-65).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the imaging apparatus Saito (162) to include: wherein the transparent main body has a groove corresponding to the image reading region, to place the transparent glass member being placed in the groove. It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified imaging device of Saito by the teaching of (Kurata (899), it would have help a user to have a device that do not cause a vibration during the movement of the scanner, to avoid a blur on the image to be read due to a shake case by the moving mechanism.

With respect to claim 6, Saito et al. teaches an image sensor (contact image sensor of fig 1), wherein the nontransparent region is formed with a white spot or a black



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spot (transparent cover glass 1, having a white side which is the side where the document is placed and black side is the opposite side of the cover glass cover).

With respect to claim 7, Saito et al. teaches an image sensor (contact image sensor of fig 1), wherein the nontransparent region is formed with both of the white spot and the black spot (transparent cover glass 1, having a white side which is the side where the document is placed and black side is the opposite side of the cover glass cover).

With respect to claim 8, Saito et al. teaches an image sensor (contact image sensor of fig 1), wherein the image reading region is linear, the transparent cover having a nontransparent region corresponding to the other end portion of the image reading region, (second side transparent cover glass 1, is non transparent region).

With respect to claim 9, Saito et al. teaches an image sensor (contact image sensor of fig 1), wherein one of the nontransparent regions is formed with a white spot and the other is formed with a black spot (transparent cover glass 1, having a white side which is the side where the document is placed and black side is the opposite side of the cover glass cover).

With respect to claim 10, Saito et al. teaches an image sensor (contact image sensor of fig 1), wherein the nontransparent region is provided by a part of the glass member rendered nontransparent, (second side transparent cover glass 1, is non transparent region).

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With respect to claim 11, Saito et al. teaches an image sensor (contact image sensor of fig 1), wherein the nontransparent region is provided by a part of the glass member applied with a coating (transparent cover glass 1 of fig 1, has coating to position on the frame 9 of fig 10).

With respect to claim 12, Saito et al. teaches an image sensor (contact image sensor of fig 1), wherein a nontransparent member (1 of fig 1) posted to a part the glass member provides the nontransparent region (second side transparent cover glass 1, is non transparent region).

With respect to claim 13, Saito et al. teaches an image sensor (contact image sensor of fig 1), wherein a nontransparent member (1 of fig 1) separate from the glass member and the cover main body provides the nontransparent region, placed in the groove (transparent cover glass 1 of fig 1 placed on frame 9 of fig 10

With respect to claim 14, Saito et al. teaches an image sensor (contact image sensor of fig 1), wherein the groove is divided into a glass member (1 of fig 1) receiving portion for receiving the glass member and a nontransparent member receiving portion for receiving the nontransparent member (transparent cover 1 of fig 1).

With respect to claim 15, Saito et al. teaches an image sensor (contact image sensor of fig 1), transparent cover 1 of fig 10 for image sensor, (12 of fig 2A) comprising a transparent main body of a synthetic resin, and a transparent glass member (1 of fig 1), the groove having at least a longitudinal end portion provided with a nontransparent region (col.1, lines 7-15).

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Saito fails to teach a groove formed in a surface of the transparent main body. Kurata et al (999) in the same area of image reading apparatus teaches a groove formed in a surface of the transparent main body, (.FIG. 3 illustrates the groove 22 of fig 3, is provided by a through hole formed on the platen of fig 3, at a front end portion of a transparent platen 21, the platen 21 is formed with an elongated groove 22 extending in the Y-direction (main scanning direction) in the upper surface and at the front end portion thereof, as discussed in col.2, lines 55-65).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the imaging apparatus Saito (162) to include: wherein the transparent main body has a groove corresponding to the image reading region, to place the transparent glass member being placed in the groove.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified imaging device of Saito by the teaching of (Kurata (999), it would have help a user to have a device that do not cause a vibration during the movement of the scanner, to avoid a blur on the image to be read due to a shake case by the moving mechanism.

With respect to claim 16, Saito et al. teaches a transparent cover for image sensor (fig 1) comprising a transparent main body of a synthetic resin, (transparent cover 1 of fig 1, made up of resin) and a transparent glass member (1 of fig 1) placed in, the transparent main body (frame 9 of fig 1) and the transparent glass member (1 of fig 10 each having a surface flush with each other and providing the first surface).

Saito fails to teach a groove formed in a surface of the transparent main body. Kurata et al (899) in the same area of image reading apparatus teaches a groove formed in a surface of the transparent main body, (.FIG. 3 illustrates the groove 22 of fig 3, is provided by a through hole formed on the platen of fig 3, at a front end portion of a transparent platen 21, the platen 21 is formed with an elongated groove 22 extending in the Y-direction (main scanning direction) in the upper surface and at the front end portion thereof, as discussed in col.2, lines 55-65).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the imaging apparatus Saito (162) to include: wherein the transparent main body has a groove corresponding to the image reading region, to place the transparent glass member being placed in the groove.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified imaging device of Saito by the teaching of (Kurata (899), it would have help a user to have a device that do not cause a vibration during the movement of the scanner, to avoid a blur on the image to be read due to a shake case by the moving mechanism.

With respect to claim 17, Saito et al. teaches an image sensor (contact image sensor of fig 1), further comprising a nontransparent region provided at least at one longitudinal end portion of the groove (transparent cover 1 of fig 1, provides a longitudinal position, as shown in fig 1).

With respect to claim 18, Saito et al. teaches an image sensor (contact image sensor of fig 1), further comprising a case covered by the transparent cover, (frame 1 of

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fig 1, including image sensor and light source, covered by transparent cover 1 of fig 1, col.1, lines 7-35) the case enclosing the light source and the plurality of light receiving elements (transparent cover 1 of fig 1, enclosing the light source 3 and plurality of image sensor 12 of fig 2a. col.4, lines 7-40).

With respect to claim 19, Saito et al. teaches an image sensor (contact image sensor of fig 1), further comprising a case covered by the transparent cover, (transparent cover 1 of fig 1) the case enclosing the light source and the plurality of light receiving elements (transparent cover 1 of fig 1, enclosing the light source 3 and plurality of image sensor 12 of fig 2a. col.4, lines 7-40).

### ***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Negussie Worku whose telephone number is 571-272-7472. The examiner can normally be reached on 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Aung Moe can be reached on 571-272-7314. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

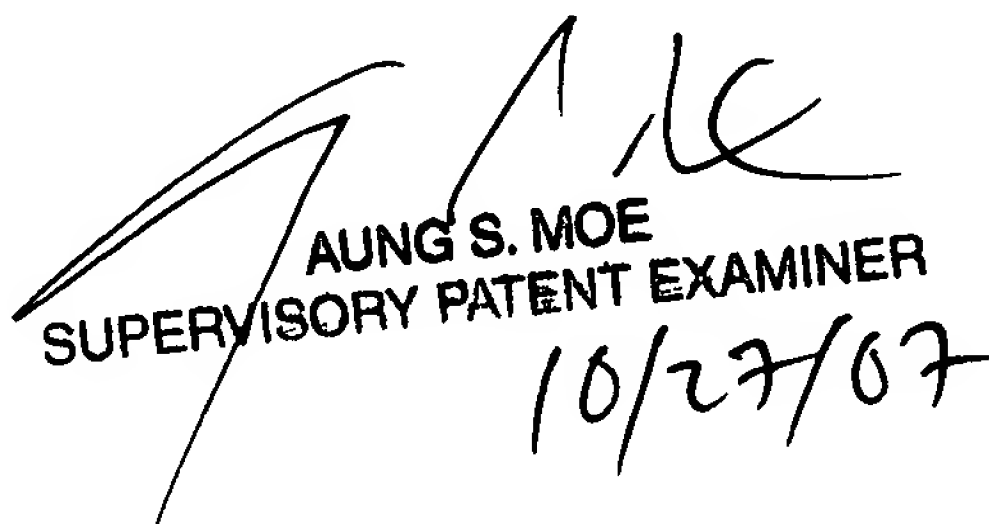
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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Negussie Worku

10/25/07



AUNG S. MOE  
SUPERVISORY PATENT EXAMINER  
10/27/07